



A Corporate Publication of Santee Cooper

POWERSOURCE

Spring 2013

FROM *the* CEO



It's springtime, and at Santee Cooper, spring ushers in more than new flowers: It heralds our annual safety meeting season.

Santee Cooper sells electricity and water to consumers throughout South Carolina. Those are dangerous businesses, especially



the generation, transmission and distribution of electricity. Safety is one of our core values, and I firmly believe we cannot give it too much attention. It's that important.

Santee Cooper has a comprehensive and robust safety training program, of course, and we complement that with constant attention to the

importance of working safe all the time, in many different settings and through many different communication channels. As part of that, once a year, our entire executive management team meets with each work group to lend our unified voice to this critical focus, to spotlight accomplishments – and to talk frankly about challenges.

That attention is paying off. I'm proud to share some excellent results in safety last year.

Late last month, the American Public Power Association presented Santee Cooper with a first place Safety Award of Excellence for safe operating practices in 2012. Santee Cooper led the category for large utilities.

All in all, more than 280 utilities entered the competition. Entrants were placed in categories according to their number of worker hours and judged for the most incident-free records during 2012. The incidence rate, which is used to judge contest entries, is based on the number of work-related reportable injuries or illnesses and

the number of worker-hours during 2012, as defined by the Occupational Safety and Health Administration (OSHA).

Earlier this year, our generating stations held their annual goals lunch and announced that the stations had set a new record in safety, with just two recordable incidents among all the facilities – and one of those was an insect bite. That is our best year since OSHA began keeping records in 1974.

At their March meeting, members of the Santee Cooper Board of Directors passed a resolution commending all Santee Cooper employees for their attention to detail and vigilance in safe work practices, noting in that resolution that “the dedicated efforts, and the improved safe work practices across the board at every level of the utility, have led to a dramatic reduction in the number of safety incidents over the past few years.”

Accidents happen. We cannot be too careful, especially when our “office” is a bucket truck several stories in the air. Getting to this point has taken teamwork and an unprecedented effort to look out not just for ourselves, but for each other. And so to each employee at Santee Cooper I say “thank you” for your vigilance, congratulations on your success, and don't let up.

Lonnie N. Carter
President and
Chief Executive Officer

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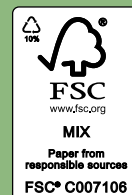
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by Nicole A. Aiello

HITS IT

photography by Jim Huff

OUT OF THE PARK





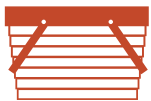
Officials with the city of North Myrtle Beach have a *dream*.



BIKING & HIKING
TRAILS



DOG PARK



PICNIC SHELTERS
& PLAYGROUND

They imagine players celebrating soccer victories, cheers as batters hit home runs, laughter at family get-togethers, dancing during outdoor concerts and the crunch of leaves under the feet of hikers.

They can almost taste victory just thinking about it. It may sound a little utopian, but isn't that the point of a dream?

The dream doesn't stop though, with just pretty images. It also includes bringing millions of dollars in economic benefits to the city. Council members and employees at the city of North Myrtle Beach aren't daunted by the scope of the undertaking, though. They've been on the fast track, bringing in experts and even bulldozers to make their dream a reality.

When the din from construction equipment dies down, the outcome will be the North Myrtle Beach Park & Sports Complex, a 160-acre, multifaceted recreation development geared toward residents and tourists alike.

SOFTBALL AND BASEBALL
FACILITY WITH SIX FIELDS

BIKING AND HIKING TRAILS



Left: A rendering shows the many features of the North Myrtle Beach Park & Sports Complex, including sports fields, trails and green space.

North Myrtle Beach Mayor Marilyn Hatley says the park will be a boon for the city's economy through additional sports tourism events. These amenities also increase the quality of life for residents.

A focal point of the complex is The Meadow, 12 acres of green space that will be ideal for picnics and family gatherings.

“We’re excited to be able to gain a larger piece of the sports tourism pie with the construction of the new North Myrtle Beach Park & Sports Complex,” says North Myrtle Beach Mayor Marilyn Hatley. “We need to grow the economy, especially in the off season, and the new complex will help pump tourism dollars when we need it most.”

John Bullard is the city’s recreation director and one of the park’s avid advocates. He agrees sports tourism is essential for growing the city’s economy when the weather is not that hot and when beach traffic is slow.



“We’re a tourism-driven economy, and we know the importance of bringing people to the area before and after the summer season,” explains Bullard. “The city of North Myrtle Beach has been working on bringing bigger sports events to the area, like the Diva race and U.S. Basketball Association tournaments. We’re making a name for ourselves in the sports tourism world, and that’s going to help everyone in the area.”

We need to grow the economy, especially in the off season, and the new complex will help pump tourism dollars when we need it most.

According to the city’s numbers, there was around \$12 million in economic impact from sports tourism alone last year. North Myrtle Beach’s Parks & Recreation Department staff have been tasked with upping that number and have groups lined up for the opening of the complex, slated for early 2014.



SOCCER, FOOTBALL
AND LACROSSE
COMPLEX

THE MEADOW

WELCOME CENTER



Construction on the North Myrtle Beach Park & Sports Complex began in December 2011. The park's grand opening is set for March 2, 2014.

As a matter of fact, the city's recreation department already has received verbal commitments from a number of sports event organizers for next year. The park's grand opening is slated for March 2, 2014.

So far, the scheduled events are estimated to have a direct impact of at least \$13.5 million on North Myrtle Beach's economy, versus an original projection of \$10.5 million annually. And North Myrtle Beach's sports staff isn't done yet.

Of course, it takes money to make money. In other words, it takes capital to plant, construct and complete a project of this size. The city of North Myrtle Beach showed its commitment to the project and raised the property tax by six mills for eight years to generate revenue for the park. It also issued \$15 million in general obligation bonds to buy the land and help pay for construction of the complex.

However, it's not all about economic gain and tourism. Mayor Hatley was also quick to point out the benefits the complex has for residents.

Says Hatley, "It's also very important to city council that the park enhances the quality of life for our residents. We're keeping a lot of green space, including a preserved wetlands





area and lakes, and adding walking, biking, and hiking trails. The park also will have added amenities that are important to our residents, such as a dog park, playground and a large grassy area for family picnics and other activities.”

Construction on the complex is in high gear and moving along ahead of schedule. Ground was broken last December. Building new roads in and around the project, located near the intersection of U.S. Highway 31 and the Robert Edge Parkway, is ongoing and grading has been completed.

The administrative office/welcome center and all other buildings will be constructed next. The soccer, baseball and softball fields will be completed by mid-May.

“Santee Cooper has been a part of the construction process and, along with the many contractors and dedicated city employees, is helping North Myrtle Beach realize their dream,” said Mike Poston, Santee Cooper’s vice president of retail operations. “As with other large-scale projects, Santee Cooper has been working closely with officials from the city of North Myrtle Beach. We will continue our ongoing work with the city and will do what we can to help them reach opening day next March.”

It’s a huge win for North Myrtle Beach. And, in less than a year, an umpire will likely usher in the first game by shouting “play ball!,” with residents and visitors hearing the echo from the first crack of the bat.

Let the games begin!

Once completed, there will be up to eight fields in the sports complex that will be used for soccer, football and lacrosse.

SEE MORE AT SANTEECOOPER.COM/POWERSOURCE OR DOWNLOAD OUR APP



BY WILLARD STRONG

**HONDA OF
SOUTH
CAROLINA:
WHEN EAST MET
WESTERN
FLORENCE COUNTY**

PHOTOGRAPHS BY JIM HUFF

THE GREEN EXIT SIGN OFF INTERSTATE 95 WEST OF FLORENCE PROCLAIMS TO TRAVELERS “HONDA WAY.”

Honda of South Carolina Manufacturing Inc., with its Timmonsville address, is an economic development success story by any definition. From the road, motorists cruising north or south see a big building with “Honda” emblazoned in red letters. Travelers may contemplate what’s made there. If they guess cars or motorcycles, they’d be wrong.

The answer is all-terrain vehicles or ATVs, although most folks call them “four-wheelers.” They’re utilitarian and popular with farmers, ranchers, hunters, law enforcement, and any number of businesses – a list that’s practically endless. ATVs have evolved from the three-wheelers of the 1970s with tricky handling characteristics to larger models featuring four-wheel drive and more car-like creature comforts.

Dubbed the “most trusted brand” among vehicle manufacturers by Kelley Blue Book, Honda enjoys a stellar reputation as a global company with high-quality products and service, and most importantly, a benchmark for customer loyalty.

Beginning in the early 1960s, its affordable Honda 50, 90 and Super Cub motorbikes (they were too cute to be called motorcycles) rocketed to national acceptance and into popular culture. The Hondells, a musical group, exuberantly extolled the freedom and fun they provided. The power of the emerging American youth market was affirmed with their No. 9 tune, 1964’s “Little Honda,” penned by Beach Boys Brian Wilson and Mike Love. Today, Honda sells more motorcycles than any company in the world.



In 1982, Honda began manufacturing Accord sedans in Marysville, Ohio, a savvy strategic move blunting the mounting criticism that imports were adversely affecting Detroit's coveted market share. The Japanese firm won the hearts and minds of those in the Buckeye state, with its good-paying jobs and high-quality product. Building a Honda product in the U.S., with no discernible difference in quality, dramatically proved that with the right mix of management and workers (Honda, as many firms do, refers to them as "associates"), expanding manufacturing on American shores made sense.

In the mid-1990s, Honda began looking around for a place to build ATVs in the South. In 1997, the firm announced it was

coming to Florence County and on July 1, 1998, the first Honda ATV rolled off the assembly line. Last year, the plant produced its 2.5 millionth ATV and announced plans to make "side-by-side" ATVs there. But getting from the first South Carolina made ATV to 2.5 million and counting is one of the state's greatest economic development stories.

Securing reliable and affordable electric power is of vital concern to any manufacturer. Filling that bill for Honda is Pee Dee Electric Cooperative. The Darlington-based co-op, which has Santee Cooper as its source of power, put on a full-court press, along with many other leading firms and individuals in the community, to get Honda to say "yes."



HONDA OF S.C. BY THE NUMBERS



PHOTO COURTESY OF HONDA

An American Honda rider sits atop a 2013 Rancher. The right mix of positive economic development factors and the popularity of ATVs in the Southeast are just a few of the reasons Honda constructed and is expanding production at its manufacturing facility in Florence County.

It wasn't easy. E. Leroy "Toy" Nettles Jr., the co-op's president and CEO, and other local and state leaders knew what Honda had to offer: world-class prestige. Getting them would send a message worldwide that the Pee Dee is open for business on a multinational playing field.

"As with any economic development project, there are hills and valleys," says Nettles, recalling the very public courting of Honda. "Honda was complicated."

One big obstacle in locating the plant was that a portion of the desired land had an initially unwilling landowner who was holding out for more money, a not uncommon occurrence when trying to seal a big deal. Because of this, Honda initially perceived they weren't welcome in Florence County, a development that could have killed the project forever.

"The community came together, and we had us one big 'Florence Wants Honda' rally at the Florence Civic Center, and that got a lot of attention," Nettles says proudly. "That

609
full-time associates

33%
ATV market share

9
different ATV products made

536k
plant square footage

Andrew Lacey, an assembly frame associate, verifies the ATV wire harness is routed per Honda specifications.

showed Honda that we really desired them and all the other issues were eventually worked out. It's a pure pleasure to work with them."

"That rally indicated what this community can do when it's united," says Brian Kelley, Pee Dee Electric Co-op's vice president of marketing. "It was very gratifying."

Honda had a choice of power providers: Pee Dee Electric and an investor-owned utility that serves Florence and other parts of the Pee Dee. It probably didn't hurt that the Honda plant in Ohio and one in Indiana are served by an electric co-op, so an initial comfort level was already there. Pee Dee Co-op competed for Honda's business and at the end of the day, they prevailed. Nettles cites one example of the co-op's flexibility.

"We allowed Honda to bring a transformer from Ohio," Nettles says. "We are in constant communication with them and we try to meet their needs each and every day. Reliable power is so critical to what they're all about, and we bring a level of attention to them they expect and deserve."

Says Nettles, "The Santee Cooper-co-op system, and I view it as a system, is a key part of the success we achieved with Honda and part of the success going on now with economic development in South Carolina. I'm one of Santee Cooper's biggest fans. The SC Power Team (the 25-year old economic development organization comprised of Santee Cooper and the state's electric co-ops) has been at the root of everything. And today, the North Eastern Strategic Alliance helps us significantly



PHOTO COURTESY OF HONDA

**RELIABLE POWER IS SO CRITICAL TO
WHAT THEY'RE ALL ABOUT, AND WE
BRING A LEVEL OF ATTENTION TO THEM
THEY EXPECT AND DESERVE."**

with resources and incentives. All the complications we experienced with Honda have been worth it because Honda is a great corporate citizen, not just to Florence County, but to the entire Pee Dee area.”

Expansion Plans

“We’re a global company with a local emphasis,” says Brian Newman, president of Honda of South Carolina, a 33-year Honda veteran. “We came to the Pee Dee because we wanted to build the products where they’re sold. That’s the Southeast. The needed infrastructure of highways I-95 and I-20 was here. The state of South Carolina was very welcoming, and the community rallied to get Honda. I can tell you, that rally made a tremendous impression in Japan.”

There are 609 full-time associates employed at the 615-acre facility and counting contract workers, that total is 850. Nine of Honda’s 11 ATV products are made there, including two and four-wheel drive models. Ten South Carolina suppliers help keep the plant up and running. Honda produced its 1 millionth ATV there by 2003, just five years after start-up and its 2 millionth model in 2007. The facility, with a 1.4-mile test track, used to make personal watercraft in addition to ATVs, but has phased out that product line.

It is that former personal watercraft space (94,000-square feet of the plants total 536,150-square footage) that is being renovated for side-by-side or SxS production. Announced last fall, Newman says expansion plans include hiring 65 new associates for the \$27 million product expansion. Finding qualified workers,

Deloris Knowlin, a subassembly associate, assembles the fuel tank side covers for the ATVs.



On May 6, 1997, Florence’s daily newspaper was able to tell the world that Honda had selected Timmonsville as the site to manufacture ATVs. On the left is Takeshi Yamada, chairman of Honda of America Manufacturing Corp., with Gov. David Beasley.

PHOTO COURTESY OF HONDA





E. Leroy "Toy" Nettles Jr., president and CEO of Pee Dee Electric Cooperative, says landing Honda in Florence County has served as a catalyst to attract other big-name firms to locate in the Pee Dee area such as food giant H.J. Heinz Co., FedEx and auto battery maker Johnson Controls, among others.

he says, has never been a problem, a good message for other firms considering locating in the region.

"We have an excellent workforce here, quality associates," Newman says. "We've never had a problem attracting and retaining the kind of associates we need. We have worked closely with Florence-Darlington Tech Special Schools on training programs and the state Department of Commerce has been helpful also. Universities in the state are another valuable resource."

Also helping day in and day out is their power supplier. You don't have to prompt Newman for his opinion.

"Pee Dee Electric is a very good service provider to us," says Newman. "They're not just a power company. We have a relationship built on trust, and it's mutual. They're always looking for ways for us to operate more efficiently and reduce energy use. If we don't have power for four hours, we would lose about \$500,000. It's absolutely critical for our power to be reliable – and it is."

"Our operations guys know their operations guys," Kelley says. "It's important to have that kind of dynamic going on. It pays off."

One aspect of the plant many may find surprising is that Honda actually casts its own engines on-site, 250 cc, 420 cc and 500 cc four stroke. Injection-molding machines make plastic parts and welding and fabrication is part of the in-house process. The facility runs five days

Opposite top: Brian Newman, president of Honda of South Carolina, explains "The Three Joys," part of Honda's global business philosophy. "It's The Joy of Buying, The Joy of Selling and The Joy of Creating," Newman says. "This is an expression of Honda's belief and desire that each person working in or coming into contact with the company, directly or through its products, should share a sense of joy through that experience."

Opposite below: The Honda assembly line in Timmonsville is a stream of manufacturing in motion.

a week with two shifts. Their mantra: DQR, which stands for Dependability, Quality and Reliability. It's that mindset, part of the corporate creed to bring "joy" to its customers, that permeates the workplace atmosphere at every Honda manufacturing facility in the world. That's a big part of why Honda enjoys a 33 percent ATV market share.

Newman says the plant could eventually evolve to other products such as their highly regarded four-stroke outboard engines and their iconic motorcycles. At present, there are no firm plans on the horizon to venture beyond ATVs and SxSs, but if this plant's ongoing success continues, that could be possible.

"There's always opportunity here," says associate Jim Mudge, a 14-year employee who lives in Timmonsville. "I consider it a career, not a job, at this plant. They have great benefits, health insurance and a stock plan."

Carolyn Porter, who's worked there 11 years and is part of the office support staff, has an hour commute from Cheraw. But for her, the good pay and the ability to grow professionally more than make up for the ride.

"I love my job," she says. "I love the atmosphere here." Associates are respected and valued globally, part of the Honda tradition, which results in products people simply want to buy because of their value and performance.

"When you think of Honda, you think of quality," Newman says. "It's fun to work for a company like that."



PHOTO COURTESY OF HONDA

Business Briefly

Loan Approved for Laurens County Industrial Building

The Santee Cooper Board of Directors on Feb. 25 approved a \$1.5 million loan for a shell building in Laurens County that will help attract new industry, jobs and investment.

In the past nine months, Santee Cooper has loaned \$5.6 million to several business development projects statewide.

“In today’s global marketplace, industry is looking for sites that are practically move-in ready. Santee Cooper has a responsibility to promote business opportunities across the state, and this loan will help build a shell structure that will, in turn, help attract good jobs for many South Carolinians,” says Santee Cooper President and CEO Lonnie Carter.

The loan will make possible a 50,000-square-foot industrial shell building in the Owings Industrial Park Phase II, which features adjacent rail, as well as water and sewer provided by Laurens County Water and Sewer Commission. Laurens Electric Cooperative, which has Santee Cooper as its power source, serves the park. The total project cost is \$2.1 million, with Laurens County providing \$600,000 in land and improvements.

2012 Economic Development Review

Santee Cooper took several significant steps in 2012 that places greater emphasis on economic development:

- A new, lower electric rate was approved by the Santee Cooper board that lays a strong foundation to attract substantial capital investment and jobs statewide. The board also approved a “loan pool” for local governments and non-profit economic development organizations that can be applied toward acquiring land, improving infrastructure or purchasing buildings.
- In Newberry County, the loan pool provided the necessary financing to assist in the construction of a shell building. In Dorchester County, it helped build out water services to an industrial park, resulting in the site being “shovel ready.”
- Santee Cooper was involved in five new announcements in 2012 within its direct-service territory, which resulted in 458 new jobs. In Horry County near Bucksport, Santee Cooper is involved in assisting the development of a marine industrial park.
- At the former Myrtle Beach Air Force Base, Santee Cooper is involved in promoting the Myrtle Beach International Technology and Aerospace Center. In Conway, a 117-acre tract at a former spinning mill is being repurposed and will be marketed for new industrial development.
- On the wholesale water front, Santee Cooper’s four-year-old Lake Marion Regional Water System added the town of Bowman to the system. The system serves the town of Santee, and plans to expand service to agency members in Berkeley, Calhoun, Dorchester and Orangeburg counties.



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A Thinking Man's Game



by Mollie Gore
photography by Jim Huff

For almost 50 years, Santee Cooper has produced the vast majority of its electricity using coal as the fuel source.

Coal was abundant and affordable. Santee Cooper was quick to install emissions-control technology on generating units. And it provided reliable, base-load electricity throughout South Carolina's short winters and long, hot summers.

In short, coal was the best choice for our customers.



System Controller Christopher Allen monitors Santee Cooper's system load and generation resources from the Energy Control Center in Moncks Corner.

Entering commercial operation in 2002, Rainey Generating Station, located near the Starr and Iva communities in western Anderson County, was Santee Cooper's first large-scale foray into natural gas-fired generation utilizing combined-cycle units.





Jeff Armfield

gas prices have plummeted. And nuclear power inched back into favor, with low-operating costs and solid safety records.

In fact, Santee Cooper is among a handful of utilities building new nuclear generation, restarting an industry that lay dormant for more than 30 years.

As these changes began taking shape, Santee Cooper made a conscious decision to increase its generating diversity. More diversity means more options, which means a better opportunity to respond to market conditions and choose generation that is most cost-effective for our customers in any given period. Fuel costs are approximately half of Santee Cooper's annual budget. So, flexibility will be key in keeping costs to customers as low as possible.

"What we're doing is turning our system upside down," says Jeff Armfield, vice president of fuels and fuel management. Armfield

In the past decade, however, the market has changed. Coal prices began climbing dramatically. Regulators approved expensive, even cost-prohibitive controls on coal-fired generating units, causing many utilities, including Santee Cooper, to shutter some of their fleet. With the recent advent of commercially viable fracking, natural

gas was recently named Santee Cooper's chief financial officer, effective July 1, 2013.

The turnaround is dramatic. For the first 10 years of this 21st century, Santee Cooper generated more than 75 percent of its electricity from coal. Some years, such as 2007, that figure exceeded 80 percent.

By contrast, last year just 59 percent of its generation came from coal. That's the lowest coal contribution since 1966, when Grainger Generating Station came online. Ironically, Santee Cooper announced in 2012 the retirement of Grainger Station, which was idled in March and officially ceased producing power on Dec. 31.

That fuel source turnaround is the result of strategic planning, constant monitoring and making decisions almost minute by minute. And it reflects successful navigation of a path pocked with constraints.

"We built coal when we did because it was the best alternative," Armfield says. Santee Cooper's customer growth came in an era after the Three Mile Island partial meltdown in 1979, which effectively ended construction of new nuclear plants in this country – until now."

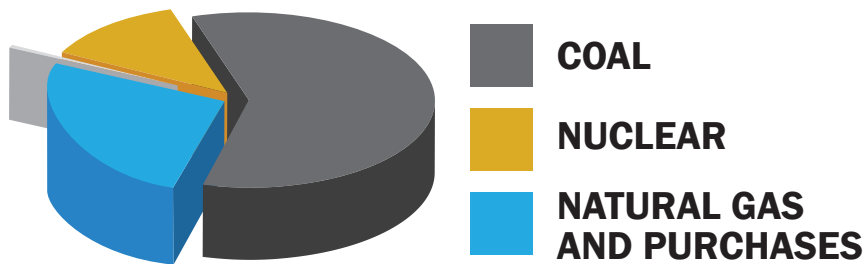
There was a moratorium on building natural gas generation when Santee Cooper needed to build Cross Generating Station, Santee Cooper's largest and most modern coal-fired facility.

"Once the moratorium ended, we built Rainey Generating Station (natural gas) because we wanted some fuel diversity," Armfield says. Those units came online in 2002 and 2004, but the price of natural gas was so high that they were only used to deliver electricity during peak-demand periods, such as during the dog days of summer."

Santee Cooper dispatches our generating units based largely on the cost of power, and for decades that meant coal units were dispatched first and most often.

The V.C. Summer Nuclear Station, which Santee Cooper co-owns with South Carolina Electric & Gas Co., came online in 1983. It has proven a steady and reliable source of low-cost power, although

**last year just
59 percent of
our generation
came from coal**



2012 fuel mix

A scrubber ties into the exhaust stack at the Cross Generating Station, near Pineville in northwestern Berkeley County.

Bottom: Crews work on a 51 and one-half hour concrete pour for the basemat at the Unit 2 construction at the V.C. Summer Nuclear Station, located near Jenkinsville in Fairfield County.



PHOTO COURTESY OF SCANA

because Santee Cooper only owns one-third of its generating capability, Santee Cooper is limited by its contribution of 318 megawatts. The two new units now under construction will not be available until 2017 and 2018.

Another constraint is access to new sources of natural gas. Rainey Station is in Anderson County, near a high-capacity Transco pipeline. Most of Santee Cooper's retail customer load is closer to the South Carolina coast. And so rather than building new natural gas generation, Santee Cooper has supplemented through the years with purchased power, through its membership in The Energy Authority, a public power marketing organization based in Jacksonville, Fla., and from other resources.

The dramatic drop in natural gas prices created a rush to build by many utilities. Santee Cooper is continuing to purchase natural gas. This means the utility can take advantage of the cost savings for customers now, without incurring capital expenses, and proceed with the new nuclear construction for long-term solutions when natural gas prices will likely resume the volatility they have historically shown.

Santee Cooper monitors all of these factors through its power marketing desk (focused on price) and its energy control center (focused on system reliability). There is also a fuels committee that oversees conditions, anticipates the situation down the road and measures actual performance against projections to build on lessons learned.

"It's very complicated," Armfield says, acknowledging critical involvement from others on the fuels committee. "It's a thinking man's game, except it's no game. Every day you've got to think about where you are, where you're going and what's the best way to get there. It's like playing chess with five or six opponents making changes on the other side."

Green Power Events: Five Years of Progress

by Melanie Brown photography by Jim Huff



Above: Jim Furyk approaches the 18th green at the 2010 Heritage.

Opposite top: Santee Cooper's Berkeley Landfill Gas Generating Station, located between Moncks Corner and Goose Creek, entered commercial operation in 2011 and is capable of producing 3 megawatts.

Opposite bottom: In 2011, Santee Cooper installed these solar panels at one of its warehouses in Myrtle Beach, which are capable of producing up to 240 kilowatts, with another 60 kW coming from a solar array of ground-mounted poles at the 10th Avenue facility.

Earlier this month, the iconic red lighthouse on Hilton Head Island went green for the fifth year in a row.

No, it wasn't by paint. Five years ago, Santee Cooper and Palmetto Electric Cooperative helped transform one of South Carolina's favorite pastimes into the first major Green Powered event and is still doing so today.

In 2009, the RBC Heritage golf tournament became the first major event in the state to utilize Green Power. Since then, Santee Cooper has helped 67 events "go green." The RBC Heritage has been one of Santee Cooper's most prominent Green Power events.

Played on the Harbour Town Golf Links since 1969, this PGA TOUR event celebrated its 45th anniversary this year. The golf tournament purchases its Green Power from Palmetto Electric Cooperative, which was one of the first cooperatives in the state to offer its customers Santee Cooper Green Power back in 2001.

In addition, the RBC Heritage dedicates prominent space beside the links for a Green Power booth, which serves to educate spectators about the benefits of renewable energy. South Carolina residents who visit

the booth have the opportunity to sign up to purchase Green Power for their electricity needs.

Green Power's successes at the RBC Heritage helped it gain traction with other major events in the state, including the annual Carolina-Clemson football game.

This storied rivalry game has been powered by 100 percent Santee Cooper Green Power since 2010. That year, Clemson University began the green tradition by teaming up with Santee Cooper and Blue Ridge Electric Cooperative to ensure the game's electricity

needs at Death Valley were met with Green Power. Williams-Brice Stadium followed the next year and Green Power returned to the Clemson stadium for the 2012 event.

In 2001, Santee Cooper became the state's first electric utility to generate and sell Green Power. Santee Cooper Green Power is renewable electricity made from landfill gas, the sun and wind. Santee Cooper produces more than 28 megawatts of Green Power with six landfill biogas stations, several solar installations and a wind turbine in commercial operation.

The Green Power Program helps to reduce the reliance on limited resources to help our environment for future generations. The best part? Santee Cooper takes 100 percent of revenues from Green Power sales or events and reinvests the money into the development of future renewable energy projects.

Any South Carolina resident can buy Green Power which is distributed by Santee Cooper and the state's electric cooperatives. That means when you buy today, you help future Green Power projects tomorrow. Purchasing Green Power is easy and affordable. For more information on Green Powering your home, business or event, go to www.santeecooper.com/greenpower or visit any of our customer service locations.





STEFFIN GUTH FIELD

SANTEE COOPER
CYBER SECURITY

BY KEVIN F. LANGSTON

PORTRAITS BY JIM HUFF

In testimony given March 12 before the U.S. Senate Select Committee on Intelligence, Director of National Intelligence James Clapper told lawmakers he anticipates a “remote chance of a major cyberattack against U.S. critical infrastructure systems during the next two years that would result in long-term, wide-scale disruption of services, such as a regional power outage.”

Clapper’s testimony comes just weeks after President Barack Obama issued an executive order on cybersecurity that acknowledges, “The cyber threat to critical infrastructure continues to grow and represents one of the most serious national security challenges we must confront.”

Government officials are clearly concerned about cybersecurity, and with good reason. One Florida-based Internet security firm estimates foreign hackers are stealing one terabyte of data each day from the U.S., with military facilities counted among the victims. Meanwhile, the Department of Homeland Security recently uncovered a cyberattack that targeted U.S. natural gas pipeline operators.

“We are in a major transformation because our critical infrastructures, economy, personal lives and even basic understanding of, and interaction with the world, are becoming more intertwined with digital technologies and the Internet,” Clapper says in his testimony. “In some cases, the world is applying digital technologies faster than our ability to understand the security implications and mitigate potential risks.”

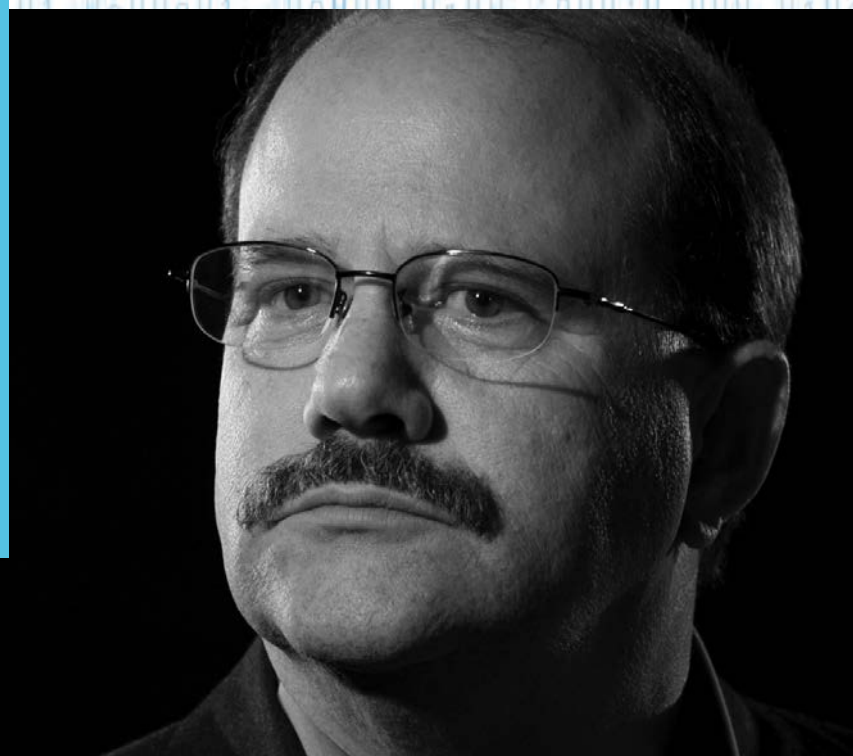
This is the environment in which Santee Cooper employees tasked with securing its critical systems, networks and data from cyberattacks do their work.

“Our job in IT is to make Santee Cooper more productive through technology. We provide the infrastructure and the applications that ride on that infrastructure,” says Ed Bodie, manager of information technology. “In the past, you would build the infrastructure and your applications, and then you would apply the security to it. We live in a very different world today, and we now consider security from the very beginning in all that we do. We must build infrastructure and applications starting with a secure foundation. Our entire process has flipped.”

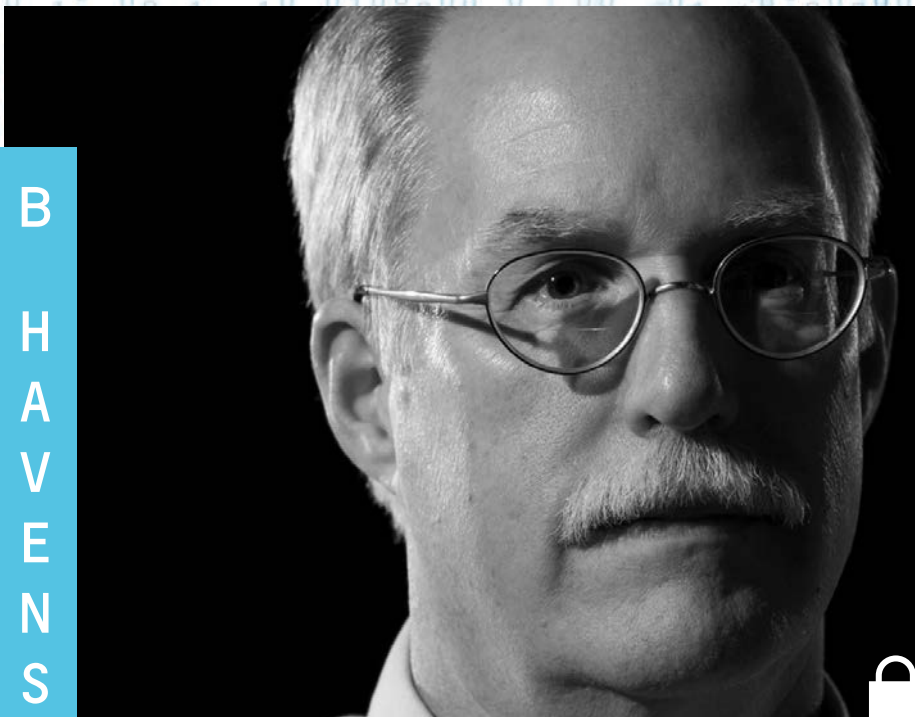
When Bodie says we live in a different world, he’s talking about our increased integration with the Web coupled with the rising threat of cybercrime.

“The problem is that computers provide us with increased productivity, and people often think of the convenience first and don’t give much thought to the security of their data,” he says. “But what is the cost of that convenience? What are we giving up in the exchange? We now have state-supported cybercrime and malicious

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organizations that push their agenda through cyberattacks. You're seeing more organized, targeted attacks."

"You can never discount the malicious intent," says Bruce Havens, director of information systems audits. "There are definitely hackers out there who do it for political purposes or financial purposes. Some hackers just have a grudge. Some use it as a form of activism. Others are doing it simply because they can."

Part of Havens' job is to make sure Santee Cooper is taking the proper precautions to protect its data from cyberattackers.

"IT has built a security mentality into its development process, which is crucial," Havens says. "Some companies place false trust in the 'security through obscurity' method, where they assume a would-be hacker can't attack what he doesn't see. That is not a good plan. If that's your attitude, you're basically welcoming disaster."

As manager of IT security and chair of Santee Cooper's corporate cybersecurity committee, Ronnie Williams feels good about the utility's approach to cybersecurity.

"We strive to ensure that we maintain a focus on security in everything we do," he says. "We can't afford to be complacent. We're constantly looking at everything we're doing, finding newer and better ways to do things. The threat landscape changes from day to day; what was secure yesterday might not be secure today. It's a constant process of 're-architecting' and refurbishing of equipment, technologies and processes."

Cybersecurity takes on many forms at Santee Cooper. There's the network security, application security, operating

system security and physical security that you'd expect from a business its size, a multibillion dollar operation. But as an electric and water utility, Santee Cooper also relies on SCADA (or Supervisory Control and Data Acquisition) systems to manage its energy and water operations.

Chris Jimenez is supervisor of SCADA systems for Santee Cooper's energy control center, which oversees the entire power-delivery system across its 7,829 miles of transmission and distribution lines. It's his job to keep cybercriminals from sabotaging the SCADA system and to ensure Santee Cooper is compliant with federal Critical Infrastructure Protection, or CIP standards.

"It's in our mission statement to provide reliable electricity to South Carolina, and cybersecurity is a critical part of that," he says. "Fortunately, Santee Cooper recognized this from an early stage and was able to put the processes and people in place to safeguard these control systems. You've got to commit the resources to cybersecurity because this is something that is not going away."

Williams says it's essential for Santee Cooper employees to rethink their understanding of cybersecurity – and to take a more active role.

"In terms of cybersecurity, we used to think of the perimeter as the wall around our infrastructure," he says. "The user is the perimeter now. We have to find ways to protect our systems from malware that may be inadvertently introduced through a USB drive, or a simple click in an email or website. It's traditionally been our job in IT to protect our systems from malware from the outside world, but now we have to protect them from the inside as well."

Education has become a critical component of Santee Cooper's cybersecurity strategy.

R W I L L I A M S



“We are creating a culture of security,” Bodie says. “People are going to connect, communicate and share information. Users must continue to be educated on the threats and understand the tools to protect what’s important. It’s about awareness and stopping to think about your actions before you click on a link or send information over the Internet.”

“You absolutely have to consider the outside threat, but you can’t ignore the inside threat,” Jimenez says. “Can an employee be compromised? Yes, and they would never even know it.”

The strategy used to steal information from the aforementioned gas pipeline operators included sending emails to deceive key personnel into clicking on malicious links or file attachments that allowed the cyberattackers to compromise company networks. Meanwhile, reports emerged in January of critical control systems within two U.S. generating facilities, breached by malware spread by USB drives.

“It’s about following best practices, and Santee Cooper has shown me that we



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always do what we can to follow best practices,” says Paul Camilletti, who oversees CIP compliance at Santee Cooper’s generating stations. “It’s about reliable power, and everybody has a piece of that.”

An additional challenge to Santee Cooper’s cybersecurity efforts is finding the balance between security and compliance.

“Operational security and regulatory compliance isn’t always the same thing,” Camilletti says. “Just because something is in compliance doesn’t guarantee it’s secure. It has to be both. At the same time, we cannot sacrifice functionality. The simplest cybersecurity solution is to lock down everyone’s computer, right? But how practical is that? It’s a very delicate balance, and communication across Santee Cooper’s cybersecurity group is key.”

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Looking toward the future, Bodie says IT is anticipating the continued integration of mobile and cloud-based systems into the corporate environment. While the use of

these technologies adds to productivity, they also present their share of security concerns.

“How do we build an architecture that allows access to your applications anytime, anywhere and from any device?” says Bodie. “We’re looking years ahead to see how we need to prepare that architecture to give users the experience they want, but also to make sure it’s a secure system. With cloud, mobile and tablet computing, we’ve broadened the number of devices and access points. We have all of these different variables now, and we need to make sure we remain secure.”

And while the threat of cybercrime certainly will not diminish, Havens says each event affords Santee Cooper and others the opportunity to safeguard from what’s out there.

“We’re always looking at what’s going on in the security world because that’s one of the ways we can better protect ourselves,” he says. “Anytime you read about a cyberattack, that’s an opportunity for us to review our security standards and to make sure we aren’t vulnerable to a similar assault.”

“The point is to never be satisfied with our security posture,” Williams says. “We have done a very good job in keeping up with the technologies available to secure our environment. We have a good, layered approach in place. In security, the environment around us is changing every day. We will continue to refine our processes, procedures and strategies in an effort to protect ourselves from the threats that are at our door now – and the ones yet to come.”

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- > FROM PAYING TAXES and changing addresses to refilling prescriptions and paying your electric bill, the Internet can just about do it all.
- > BUT WITH INCREASING INTERNET USAGE, the issue of cybersecurity has become of paramount importance. Here at Santee Cooper, it is our responsibility and obligation to make customers feel secure when doing business with us. Protecting customers' personal information is not only our way of doing business, it is our lawful duty.
- > THE SANTEE COOPER E-BILLING SYSTEM has utilized a secure, third-party vendor, FIS Pay Direct Solutions, since e-billing started in 2001.
- > "WE'VE HAD THIS PROGRAM since day one," says Sabrina Seay, data steward for retail services, part of the utility's customer service department. "We made sure that the vendor we chose had plenty of security around it, and FIS makes sure our customers are well protected. FIS has proved to be very successful, and we have never had any real issues."
- > THROUGHOUT THE YEARS, FIS has made upgrades to their system to better fit Santee Cooper and its customers. The information technology department at Santee Cooper also performs tests to ensure all data is secure.
- > PREVENTING A "CASUAL" USER on the system access to information provided by other customers or the general public is one of the system's goals. When you enroll in e-Billing, you will enter a secure password, personal information and method of payment. All information is transmitted in an encrypted format.
- > SHARING INFORMATION VIA THE INTERNET can be a scary and worrisome task for many. When faced with the decision of dropping off your Santee Cooper payment versus paying online, you can be confident that all your information shared with us is highly secured and protected.
- > THE INTERNET OFFERS THE FLEXIBILITY of paying your bills from anywhere at any time, and we have you covered. If you have any further questions or concerns, feel free to visit our website at www.santeecooper.com.

by Melanie Brown



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First Nuclear Concrete Placement Completed at V.C. Summer

South Carolina Electric & Gas Co., Santee Cooper's partner in the expansion of the V.C. Summer Nuclear Station, announced March 11 that it had completed placement of the nuclear island basemat for Unit 2 at the Fairfield County facility.

This major milestone is the first new construction nuclear concrete to be poured in the U.S. in three decades.

"This is a tremendous day for South Carolina as we work with SCANA to deliver new nuclear generation that will help ensure reliable, affordable electricity for decades to come," said President and CEO Lonnie Carter. "We've come to this point through the diligent and conscientious attention to task by everyone involved, from our crews, to the Nuclear Regulatory Commission."

"This is an exciting achievement for SCE&G, Santee Cooper, CB&I, Westinghouse Electric Company, and others who support our new nuclear project," said Kevin Marsh, chairman and CEO of SCANA Corp., SCE&G's parent firm. "We recognize the significance of this event and appreciate the strong commitment to safety and collaboration demonstrated by all involved in reaching this milestone."

The basemat provides a foundation for the containment and auxiliary buildings located within the nuclear island. Measuring 6 feet in thickness, the basemat required approximately 7,000 cubic yards of concrete to cover an area about 250 feet long and 160 feet at its widest section.

The 51 and one-half hour continuous pour of concrete covered a surface totaling 32,000 square feet. About 1,550 workers are currently involved in constructing two new reactors at V.C. Summer, where Unit 1 has operated safely and reliably for 30 years.

The new nuclear project will peak at about 3,000 workers over the course of three to four years. The two 1,117-megawatt units will add 600 to 800 permanent jobs. The new units are projected to start generating electricity in 2017 and 2018, respectively.

Santee Cooper owns one-third of the station's current generating capability and 45 percent of the new project.

Santee Cooper Received High 2012 Customer Satisfaction Marks

Results from Santee Cooper's annual residential customer satisfaction survey reveal Santee Cooper again exceeds national and state satisfaction measures and continues to excel in areas such as reliability, customer service, value and environmental responsibility. According to MarketSearch:

- 98.7 percent of residential customers were satisfied, mirroring overall satisfaction in 2011. By comparison, the

national average was 92.1 percent and the South Carolina utility average was 90 percent.

- 99.7 percent of respondents indicated their service has been reliable, with 93 percent of those saying their service is very reliable.

"In keeping with our values and our mission to improve the quality of life for the people of South Carolina, Santee Cooper employees strive to provide excellent service for our customers," said Santee Cooper President and CEO Lonnie Carter.

Holiday Lights Display Gives Back to the Community

The 2012 Celebrate The Season, Santee Cooper's holiday lights display supported by 45 businesses and organizations, delivered \$145,412.18 to charities serving Berkeley County and the tri-county area.

That total includes sponsorships, gate proceeds during the month-long event and vendor sales that were donated to charities of their choice. On Feb. 28, Santee Cooper President and CEO Lonnie Carter presented a \$98,926.54 check to the Coastal Community Foundation's Giving Back to Berkeley Fund. A second check, for \$15,000, went to the Berkeley County Museum and Heritage Center. Santee Cooper serves as title sponsor and organizer for the annual festival and holiday lights driving tour, which is held at the utility's Moncks Corner headquarters and its adjacent Old Santee Canal Park.



Marlanda Williams is one of three CSRs trained with our initial launch of Live Chat in 2012, just one of many communication avenues that help Santee Cooper keep our customers satisfied.



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